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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,062	07/30/2001	Donald J. Schrepf	10004377-1	2666

7590 01/14/2003

AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

PADMANABHAN, KARTIC

ART UNIT	PAPER NUMBER
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1641

DATE MAILED: 01/14/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,062

Applicant(s)

SCHREMP ET AL.

Examiner

Kartic Padmanabhan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) 26-70 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-70 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I in Paper No. 4 is acknowledged. The traversal is on the ground(s) that Groups I-VI are so related as to comprise one group that should be examined together and has proposed a 6-way grouping of their own. This is not found persuasive because the record set forth in the previous restriction requirement clearly indicates that the delineated inventions are, in fact, patentably distinct, each from the other, and their different classification would necessitate additional searching.

The requirement is still deemed proper and is therefore made FINAL.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

3. The disclosure is objected to because of the following informalities: the spacing of the last line on page 37 should be fixed.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 1 recites the limitations "the edge", "the height", and "the design.". There is insufficient antecedent basis for these limitations in the claim.

7. The term "substantial" in claim 1 is a relative term which renders the claim indefinite. The term "substantial" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

8. The term "substantially" in claim 2 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

9. Claim 7 recites the limitation "the width". There is insufficient antecedent basis for this limitation in the claim.

10. Claim 8 recites the limitation "said ledge". There is insufficient antecedent basis for this limitation in the claim.

11. Claims 12-15 recite the limitation "the top portion". There is insufficient antecedent basis for this limitation in the claims.

12. Claims 22 and 23 are rejected as vague and indefinite for reciting process limitations in a device claim. In device claims, only the elements of the device are given patentable weight, and process limitations are not interpreted as further limiting the device in any way. Therefore,

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claims 22 and 23 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-3, 5-6, 8-9, 11-16, and 19-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Earley et al. (WO 94/08759 A1). The reference discloses a microtiter plate comprising multiple wells, which, when given their broadest reasonable interpretation, reads on claims drawn to a device with a housing, a support, wells with sloped walls, and a ledge. The reference also discloses the use of lids with the microtiter plate. Further, the microtiter plate is used to perform DNA sequencing reactions. As such, sample with DNA is loaded into the wells of the plate, such that the bottom surface of the well (support) will comprise or contact DNA molecules.

15. Claims 1-3, 5-6, 8-9, 11-16, 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Pedley (GB 2 197 720 A). The reference discloses a microtiter plate comprising multiple wells, which, when given their broadest reasonable interpretation, reads on claims drawn to a device with a housing, a support, wells with sloped walls, and a ledge. In addition, the reference discloses the immobilization of polynucleotides to the wells of the plate (abstract).

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16. Claims 1-3, 5-6, 8-9, 11-16, and 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Balch (US Pat. 6,083,763). The reference discloses a microtiter plate comprising multiple wells, which, when given their broadest reasonable interpretation, reads on claims drawn to a device with a housing, a support, wells with sloped walls, and a ledge. In addition, the reference discloses that the plate may comprise DNA probes.

17. Claims 1-3, 5-6, 8-9, 11-16, 19, and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Daniel (US Pat. 4,919,894). The reference discloses a microtiter plate comprising multiple wells, which, when given their broadest reasonable interpretation, reads on claims drawn to a device with a housing, a support, wells with sloped walls, and a ledge. In addition, the reference discloses a cover that sits over the microtiter plate to reduce cross-infection between samples and infection from the air.

18. Claims 1-3, 5-6, 8-9, 11-16, 19, and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Matkovich et al. (US Pat. 4,828,386). The reference discloses a microtiter plate comprising multiple wells, which, when given their broadest reasonable interpretation, reads on claims drawn to a device with a housing, a support, wells with sloped walls, and a ledge.

According to the reference, membrane inserts can fit within the wells of the microtiter plate or can extend above the well walls. The inserts are removable from the plate. The inserts can be used with standard microtiter plates or the plate can be adapted for specific use with the inserts.

19. Claims 1-3, 5-6, 8-9, 11-16, 19, and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Calenoff et al. (US Pat. 4,844,966). The reference discloses a microtiter plate comprising multiple wells, which, when given their broadest reasonable interpretation, reads on

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claims drawn to a device with a housing, a support, wells with sloped walls, and a ledge. The reference also discloses well inserts.

20. Claims 1-3, 5-6, 8-9, 11-16, 19, and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Provonchee (US Pat. 4,701,754). The reference discloses a microtiter plate comprising multiple wells, which, when given their broadest reasonable interpretation, reads on claims drawn to a device with a housing, a support, wells with sloped walls, and a ledge. The reference also discloses that the wells do not necessarily have to form part of an integral unit, but may be independently removable from a supporting rack. The configuration of the wells in either case is preferably an array of one or more rows.

21. Claims 1-3, 5-6, 8-16, 19, and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Cassin et al. (US Pat. 5,910,287). The reference discloses a microtiter plate comprising multiple wells, which, when given their broadest reasonable interpretation, reads on claims drawn to a device with a housing, a support, wells with sloped walls, and a ledge. In addition, the reference discloses that the wells of the reference may be made in any cross-sectional shape, including square. The walls of the wells may be completely vertical or may be conical. The reference also discloses cycloolefins that may comprise part of a plate cover.

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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23. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

24. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

25. Claims 4, 7, 10, 17-18, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Earley et al. (WO 94/08759 A1), Pedley (GB 2 197 720 A), Balch (US Pat. 6,083,763), Daniel (US Pat. 4,919,864), Matkovich et al. (US Pat. 4,828,386), Calenoff et al. (US Pat. 4,844,966), or Provonchee (US Pat. 4,701,754).

The references all teach microtiter plate devices, as previously discussed. However, the references do not teach the specific dimensions of the device, such as size (height, length, width, angles) nor do they teach rectangular ledges.

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to modify the dimensions of the devices of Earley et al., Pedley, Balch, Daniel,

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Matkovich et al., Calenoff et al., or Provonchee (US Pat. 4,701,754) to the specific lengths, widths, and angle sizes required by the present claims. One would have been motivated to do so because Matkovich et al. teach that a microtiter plate may be adapted for specific purposes. In addition, it would have been an obvious matter of design choice, since such a modification would have involved a mere change in the size of components. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). It would have also been obvious to use a rectangular ledge for the plate, as opposed to a circular one, as such a modification is a simple optimization of the assay device and is not thought to change the device in any substantial manner.

26. Claims 4, 7, 17-18, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cassin et al. (US Pat. 5,910,287).

The reference teaches a microtiter plate, as previously discussed. However, the reference does not teach the specific dimensions of the device, such as size (height, length, width, angles).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to modify the dimensions of the device of Cassin et al. to the specific lengths, widths, and angle sizes required by the present claims. It would have been an obvious matter of design choice, since such a modification would have involved a mere change in the size of components. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Conclusion

Claims 1-25 are rejected.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kartic Padmanabhan whose telephone number is 703-305-0509. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 703-305-3399. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-5207 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Kartic Padmanabhan
Patent Examiner
Art Unit 1641

January 7, 2003



LONG V. LE
SUPERVISORY PATENT EXAMINER
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1/13/03